

ABSTRACT

AIM:

The aim of the study is to compare the efficacy and tolerability of Narrowband-UVB alone versus Narrowband-UVB with 0.1% tacrolimus in the treatment of vitiligo.

MATERIALS AND METHODS:

A randomized, open, prospective and comparative study was conducted in 50 patients who were attending the dermatology outpatient department of Chengalpattu Medical College for a period of 1 year (April 2015 – April 2016), satisfying the inclusion and exclusion criteria after obtaining the ethical clearance.

METHODOLOGY:

During the initial visit, patients demographic details including the name, age, sex, address, outpatient number were recorded. A detailed clinical and dermatological assessment of the disease was carried out in all patients. Relevant hematological and biochemical investigations were done. Estimation of percentage of body surface area that is affected by vitiligo was assessed. Patient was randomly allocated into two groups 1 and 2 by means of sequential numbered list.

25 patients in group 1 were treated with narrowband-UVB weekly thrice. 25 patients in group 2 were treated with once daily application of topical 0.1% tacrolimus along with thrice weekly administration of narrowband-UVB. The primary efficacy parameter, VASI was assessed at baseline and then every 2 months during follow up for 1 year. The secondary efficacy

parameters, 1.Physician global assessment and 2.Patient global assessment were evaluated at the end of 12 months.

Statistics used was 't' test, Paired 't' test, Chi square test, ANOVA. Software used was SPSS (version 17).

RESULTS:

The baseline demographic data and baseline characteristics in both the study groups when compared were similar. The overall efficacy of NB-UVB with 0.1% tacrolimus was greater than NB-UVB alone after 12 months of treatment, with earlier treatment response in NB-UVB and tacrolimus group. Lesions in the face, trunk, upperlimbs, and lowerlimbs shows earlier repigmentation in patients treated with NB-UVB and tacrolimus than NB-UVB alone. Lesions in hands and feet needs longer duration of treatment while comparing trunk, face, upper and lower limbs in both modalities of treatment.

CONCLUSION:

Narrow band-UVB with 0.1% tacrolimus is superior to Narrow band-UVB alone for treatment of vitiligo in terms of reduction in vitiligo area which was comparable with similar studies. There was a statistically significant reduction in percentage of VASI ($p=0.004$) with NB-UVB and tacrolimus group when compared to NB-UVB alone at the end of treatment. The study shows a statistically significant difference in VASI reduction ($p=0.002$) after treating with NB-UVB and tacrolimus than NB-UVB alone. The results of secondary efficacy parameters like physician global assessment, patient global assessment were in favour of NB-UVB and tacrolimus group.